

Listing of Claims:

20. (Previously Presented) A method for processing multimedia data in a computer system, comprising:

receiving as input a high-level concept describing data to be accessed;

translating the high-level concept into a low-level query by using stored concept

constructs which are defined using features derived from a plurality of application domains; and

transferring the low-level query to one or more search engines to access information

using the low-level query.

21. (Previously Presented) A method as defined in Claim 20, further comprising:

storing the concept constructs in a concept library module;

storing the features in a feature library module;

storing constraints in a constraint library module; and

storing matching algorithms in a matching algorithm library module.

22. (Previously Presented) A method as defined in Claim 21, further comprising interfacing the library modules to the application domains.

23. (Previously Presented) A method as defined in Claim 21, further comprising building a concept construct.

24. (Previously Presented) A method as defined in Claim 23, wherein the step of

building a concept construct comprise combining one or more of the features with zero or more of the stored concept and zero or more of the constraints.

25. (Previously Presented) A method as defined in Claim 23, wherein a concept construct is represented using a hierarchical fuzzy graph data tree-structure comprising:

nodes that correspond to child-concepts and a subset of the features;
aggregation edges that correspond to parent-child relationships; and
association edges that correspond to inter-sibling constraints.

26. (Previously Presented) A method as defined in Claim 20, wherein the features are user defined.

27. (Previously Presented) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for processing multimedia data in a computer system, said method steps comprising:

receiving as input a high-level concept describing data to be accessed;
translating the high-level concept into a low-level query by using stored concept constructs which are defined using features derived from a plurality of application domains; and
transferring the low-level query to one or more search engines to access information using the low-level query.

28. (Previously Presented) A program storage device as defined in Claim 27, further

comprising:

- storing the concept constructs in a concept library module;
- storing the features in a feature library module;
- storing constraints in a constraint library module; and
- storing matching algorithms in a matching algorithm library module.

29. (Previously Presented) A program storage device as defined in Claim 28, further comprising interfacing the library modules to the application domains.

30. (Previously Presented) A program storage device as defined in Claim 28, further comprising building a concept construct.

31. (Previously Presented) A program storage device as defined in 30, wherein the step of building a concept construct comprise combining one or more of the features with zero or more of the stored concept and zero or more of the constraints.

32. (Previously Presented) A program storage device as defined in Claim 30, wherein a concept construct is represented using a hierarchical fuzzy graph data tree-structure comprising:
nodes that correspond to child-concepts and a subset of the features;
aggregation edges that correspond to parent-child relationships; and
association edges that correspond to inter-sibling constraints.

33. (Previously Presented) A program storage device as defined in Claim 27, wherein the features are user defined.

34. (Previously Presented) A system for processing multimedia data in a computer system, comprises:

a concept translation engine that receives a high-level concept describing data to be accessed, translates the high-level concept into a low-level query using stored concept constructs which are defined using features derived from a plurality of application domains, and transfers the low-level query to one or more search engines to access information using the low-level query; and

a concept repository for storing and accessing the concept constructs.

35. (Previously Presented) A system as defined in Claim 34, wherein the concept repository comprises:

a concept library module for storing the concept constructs;

a feature library module for storing the features;

a constraint library module for storing constraints; and

a matching algorithm library module for storing matching algorithms.

36. (Previously Presented) A system as defined in Claim 35, the concept repository further comprises an application program interface to interface the library modules to the

application domains.

37. (Previously Presented) A system as defined in Claim 34, wherein the translation engine comprises a concept cataloger that builds a concept construct.

38. (Previously Presented) A system as defined in Claim 34, wherein the translation engine further comprises an interpreter that translates the high level concept.

39. (Previously Presented) A system as defined in Claim 34, further comprises a search engine.